

I claim:

1. A computer system for automatically generating a process step, comprising:
 - a meta data definition storage containing a definition of the process step to be generated and a first function;
 - a process generator for generating the process step on the basis of the definition in the meta data definition storage;
 - an application data storage for storing application data, the application data being linked in accordance with a data logic;
 - a runtime meta data storage for storing the data logic of the application data; and
 - a runtime environment for accessing the application data on the basis of the data logic and executing the process step using the application data by means of the first function specified in the meta data definition storage.
2. The computer system of claim 1, further comprising:
 - a runtime kernel; and
 - an application shell;
 - wherein the runtime kernel and the application shell are part of the runtime environment, and wherein the runtime environment determines whether the first function is a standardized, application-independent function or an application-dependent function, and wherein the runtime kernel executes the first function when the first function is a standardized, application-independent function, and wherein the application shell executes the first function when the first function is an application-dependent function.

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3. The computer system of claim 1, wherein the first function is specified in the meta data definition storage by at least one of execution timing meta data, execution location data, a call and a statement string.
 4. The computer system of claim 1, wherein the runtime environment acquires the data logic of the application data and stores the acquired data logic in the runtime meta database.
 5. The computer system of claim 4, wherein the data logic is acquired as anode links, the anode links representing connections amongst a plurality of data items in an application data storage.
 6. A method of generating a process step, comprising the steps of:
 - selecting a definition of the process step to be generated from a meta data definition storage;
 - generating the process step on the basis of the definition selected from the meta data definition storage;
 - reading out a specification of a first function to be implemented in a runtime environment from the meta data definition storage;
 - reading out a data logic of application data from a runtime meta database;
 - accessing application data on the basis of the data logic stored in the runtime meta database; and
 - executing the process step in the runtime environment using the application data by means of the specification of the first function read out from the meta data definition storage.
 7. The method of claim 6, further comprising:
 - determining whether the first function is a standardized, application-independent function or an application-dependent function;

executing the first function on a runtime kernel in the runtime environment if the first function is a standardized, application-independent function; and

executing the first function on an application shell in the runtime environment if the first function is an application-dependent function.

8. The method of claim 6, wherein the specification of the first function to be implemented in the runtime environment from the meta data definition storage comprises at least one of execution timing meta data, execution location data, a call and a statement string.
9. The method of claim 6, further comprising:
 - acquiring the data logic of the application data; and
 - storing the acquired data logic in the runtime meta database.
10. The method of claim 9, wherein the data logic is acquired as anode links, the anode links representing connections amongst a plurality of data items.
11. A computer memory encoded with executable instructions representing a computer program for generating a process step, comprising
 - means for selecting a definition of the process step to be generated from a meta data definition storage;
 - means for generating the process step on the basis of the definition selected from the meta data definition storage;
 - means for reading out a specification of a first function to be implemented in a runtime environment from the meta data definition storage;
 - means for reading out a data logic of application data from a runtime meta database;
 - means for accessing application data on the basis of the data logic stored in the runtime meta database; and

means for executing the process step in the runtime environment using the application data by means of the specification of the first function read out from the meta data definition storage.

12. The computer memory of claim 11, further comprising:
 - means for determining whether the first function is a standardized, application-independent function or an application-dependent function;
 - means for executing the first function on a runtime kernel in the runtime environment if the first function is a standardized, application-independent function; and
 - means for executing the first function on an application shell in the runtime environment if the first function is an application-dependent function.
13. The computer memory of claim 11, wherein the specification of the first function to be implemented in the runtime environment from the meta data definition storage comprises at least one of execution timing meta data, execution location data, a call and a statement string.
14. The computer memory of claim 11, further comprising:
 - means for acquiring the data logic of the application data; and
 - means for storing the acquired data logic in the runtime meta database.
15. The computer memory of claim 14, wherein the data logic is acquired as anode links, the anode links representing connections amongst a plurality of data items.
16. A computer-readable medium for storing a plurality of instruction sets for causing a computer system to generate a process step by performing the steps of:
 - selecting a definition of the process step to be generated from a meta data definition storage;

generating the process step on the basis of the definition selected from the meta data definition storage;

reading out a specification of a first function to be implemented in a runtime environment from the meta data definition storage;

reading out a data logic of application data from a runtime meta database;

accessing application data on the basis of the data logic stored in the runtime meta database; and

executing the process step in the runtime environment using the application data by means of the specification of the first function read out from the meta data definition storage.

17. The computer-readable medium of claim 16, wherein the computer system is caused to perform the further steps of:
- determining whether the first function is a standardized, application-independent function or an application-dependent function;
 - executing the first function on a runtime kernel in the runtime environment if the first function is a standardized, application-independent function; and
 - executing the first function on an application shell in the runtime environment if the first function is an application-dependent function.
18. The computer-readable medium of claim 16, wherein the specification of the first function to be implemented in the runtime environment from the meta data definition storage comprises at least one of execution timing meta data, execution location data, a call and a statement string.
19. The computer-readable medium of claim 16, wherein the computer system is caused to perform the further steps of:
- acquiring the data logic of the application data; and

storing the acquired data logic in the runtime meta database.

20. The computer-readable medium of claim 19, wherein the data logic is acquired as anode links, the anode links representing connections amongst a plurality of data items.